

## Eosinophilic granuloma of the femur with its radiological and histopathological images

Eosinophilic granuloma

Zülfü Birkan, Erhan Kaymaz  
Radyoloji, Silivri Devlet Hastanesi, İstanbul, Turkey

One of the three clinical presentations of Langerhans cell histiocytosis, Eosinophilic Granuloma (EG) develops as a result of the benign inflammatory reaction to an etiological agent, with an undetermined cause. It is commonly seen in children and young adults. Most common locations in the body are primarily the skull, followed by diaphyses of long bones, such as costae and femur. In this report, we have aimed to present a 12- year old case we diagnosed with EG with the aid of imaging techniques, that had presented with pain in his femoral area for a period of time, along with the review of relevant literature (Figure 1, 2, 3 and 4).



Figure 1. On this anterior-posterior X-ray image of the femur, an osteolytic lesion in the diaphysis, with an intramedullary location, of magnitude as 5x2,5 cm, that caused cortical thinning in the neighbouring cortex is identified.

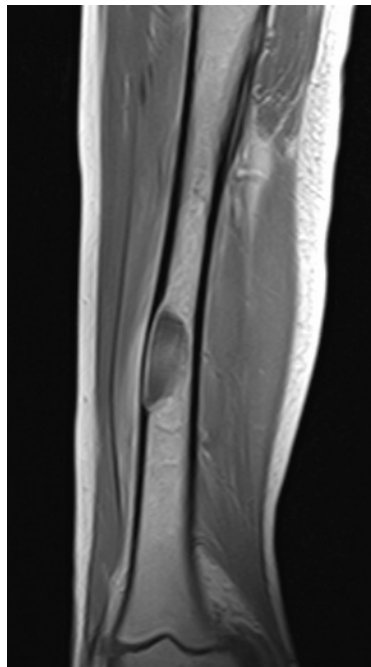


Figure 2. On this coronal T1A- weighted sequence image, a regularly- bordered lesion located in the diaphysis of the femur, characterized by minimally expansile hypointense signalling feature, that causes thinning in the neighbouring cortex is identified.



Figure 3. On this coronal fat- suppressed T2A- wieghted sequence image, a lesion located in the femoral diaphysis, characterized by surrounding hypointense, mildly expansile hyperintense signalling feature, along with signalling due to a certain quantity of edema around its medullary area, is shown.

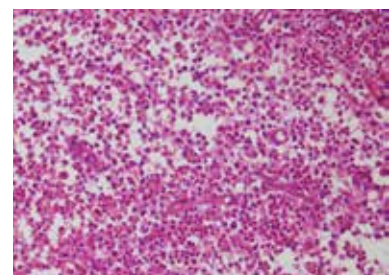


Figure 4. In this cytological specimen following surgery; infiltration of Langerhans cells accompanied by their multinuclear forms (green arrow) and eosinophilic leucocytes (blue arrow), is observed.